

### III. REMARKS

1. Claims 1, 2, 6-9, 11, 13-15, 19, 20, 24-27, 29, 32, 33, 37-43, and 54-68 remain in the application. Claims 3-5, 10, 12, 16-18, 21-23, 28, 30, 31, 34-36, and 44-53 have been cancelled without prejudice. Claims 69-83 are new. Claims 1, 2, 11, 19, 29, 41-43, and 54-68 have been amended.

2. Applicants appreciate the indication that claims 12 and 31 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. However, Applicants believe that these claims are patentable as they stand for the reasons stated below.

3. Applicants respectfully submit that claims 1, 2, 6-9, 11, 13-15, 19, 20, 24-27, 29, 32, 33, 37-43, and 54-68 are not anticipated by Kalevo et al. (WO 98/41025, "Kalevo") under 35 USC 102(b).

Kalevo fails to disclose or suggest examining the types of the first and second prediction encoding methods to determine a value of at least one parameter of the adaptive block boundary filtering operation performed on the block boundary, as essentially recited by independent claims 1, 19, 37-43, 54-57, and 68.

The Examiner correctly states that the filtering operation in Kalevo depends on various parameters including the size of the quantization step in the coding process. However, Applicants do not agree that a large difference value or significantly different quantization parameters between two blocks across the boundary indicates that the blocks are of different types.

The present claims clarify that block boundary filtering is performed on a boundary between first and second decoded image blocks on respective sides of the block boundary. The first and second image blocks have been encoded using first and second prediction encoding methods. The types of the first and second prediction

encoding methods are examined to determine a value of a parameter of the block boundary filtering.

Kalevo presents a method for removing blocking artifacts from a frame of a video sequence. According to Kalevo's method, a certain number of pixels (n) are selected for examination from both sides of a block boundary, the number of pixels selected depending on the image content of the frame in the environment of the block boundary (see abstract). More specifically, according to Kalevo, the number of pixels to be corrected, the characteristic features of the filter being used and the size of the filtering window depend upon the following factors (see page 4, lines 8 to 20 of WO 98/41025):

- a) the difference between pixel values across a block boundary to be filtered;
- b) the size of the quantization step of the transformation coefficients used in transformation coding of the image blocks; and
- c) differences in values between pixels on the first side of the block boundary and corresponding differences between pixels on the second side of the block boundary.

Thus, it is clear that Kalevo does not examine the predictive encoding methods used to encode image blocks on either side of the block boundary.

A large difference value or significantly different quantization parameters does not indicate that different predictive encoding methods have been used on both sides of the block boundary.

At least for these reasons, Applicants submit that Kalevo does not anticipate claims 1, 2, 6-9, 11, 13-15, 19, 20, 24-27, 29, 32, 33, 37-43, and 54-68.

4. Claims 69 and 70 are new and are directed to performing a filtering operation on a block boundary that is dependent at least in part on a prediction encoding method used to encode an image block on a first side of the block boundary.


None of the cited references disclose or suggest this feature.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Please charge Deposit Account No. 16-1350 \$1,990.00 for a two (2) month extension of time (\$460.00), for the additional claims (\$720.00), and for the RCE fee (\$810.00).

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

  
Joseph V. Gamberdell, Jr.  
Reg. No. 44,695

30 October 2007  
Date

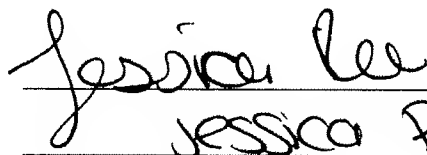
Perman & Green, LLP  
425 Post Road  
Fairfield, CT 06824  
(203) 259-1800  
Customer No.: 2512

#### CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being transmitted electronically, on the date indicated below, addressed to the Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 10.30.2007

Signature:

  
Jessica Pace

Person Making Deposit